



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,896	02/23/2004	Takeshi Saito	249170US2RD	5953
22850	7590	01/25/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			AVERY, JEREMIAH L	
			ART UNIT	PAPER NUMBER
			2131	
			NOTIFICATION DATE	DELIVERY MODE
			01/25/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

- patentdocket@oblon.com
- oblonpat@oblon.com
- jgardner@oblon.com

AK

Office Action Summary	Application No. 10/782,896	Applicant(s) SAITO ET AL.	
	Examiner Jeremiah Avery	Art Unit 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 February 2004.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 February 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. Claims 1-18 have been examined.

Information Disclosure Statement

1. The Information Disclosure Statement filed on 05/24/04 is objected to due to it being in an improper format. The Examiner recommends that the Applicant lists the "related cases" on a form PTO 1449.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. The embedded hyperlinks are found on pages 2, 16 and 17. Appropriate correction is required.

Claim Objections

3. Claim 11 is objected to because of the following informalities: punctuation error. After the claim language, "to the transmission device" there is a period rather than a semi-colon, of which would be a proper punctuation mark to use. Otherwise, the claim reads as ending after "to the transmission device" with the subsequent limitation not being a part of claim 11. Appropriate correction is required.
4. Claim 15 is objected to because of the following informalities: spelling error. "an update judgement unit" is improper, "judgement" should be spelled "judgment". Appropriate correction is required.

5. Claim 16 is objected to because of the following informalities: in the last line of claim 16, the language reads "as the the multicast packet". One of the "the"s should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 17 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 17 and 18 claim a "computer program product" but does not specify that it is embodied on a tangible medium. Though the code is utilized to cause a computer to function in a particular manner, the claim language does not state that said "computer program product" is currently on the computer(s) being utilized. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 7,237,108 to Medvinsky et al., hereinafter Medvinsky.

7. Regarding claim 1, Medvinsky discloses a transmission device, comprising:
a transmission control unit configured to control a transmission of a packet that requires a copyright protection which contains an encrypted electronic data, a copyright protection control data, and an RTP (Real-time Transport Protocol) header including a value of a dynamic payload type that indicates information regarding a state of the encrypted electronic data (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51 and column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding");
a negotiation unit configured to carry out a negotiation to determine the value of the dynamic payload type for each communication in advance, with a reception device (column 1, lines 56-67, column 2, lines 1-13 and 29-47, column 3, lines 30-46, column 4, lines 44-64 and column 5, lines 33-47);
and an authentication and key exchange processing unit configured to carry out an authentication and key exchange processing for purpose of the copyright protection, with the reception device (column 4, lines 44-64, column 5, lines 3-17 and 48-67, column 6, lines 1-6 and 17-29, column 7, lines 41-67, column 8, lines 1—34 and 46-61, column 10, lines 42-52 and 65-67, column 11, lines 1-15 and column 15, lines 13-26).
8. Regarding claim 2, Medvinsky discloses a copyright protection information notification unit configured to transmit information for notifying that the packet requires the copyright protection to the reception device, after transmitting the packet to the

reception device (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51 and column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding").

9. Regarding claim 3, Medvinsky discloses an encryption information notification unit configured to notify information for notifying that the packet requires the copyright protection and an encryption frame size of the packet to the reception device, before transmitting the packet to the reception device (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51, column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding" and column 15, lines 47-67).

10. Regarding claim 4, Medvinsky discloses an encryption frame size reception unit configured to receive an encryption frame size of the packet, transmitted from the reception device (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51, column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding" and column 15, lines 47-67);

an encryption unit configured to encrypt the packet according to the encryption frame size received by the encryption frame size reception unit (column 2, lines 29-56,

“encrypting the entire RTSP message including the header”, column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 7, lines 14-35, column 10, lines 42-53, column 12, lines 22-32 and 39-51, column 13, lines 8-40, “RTP Security Services”, “RTP Cryptographic Mechanisms” and “RTP Packet Encoding” and column 15, lines 47-67).

11. Regarding claim 5, Medvinsky discloses wherein the value of the dynamic payload type indicates more than one values or an arbitrary value within a prescribed range (column 15, lines 47-67, “W should be 32 or 64”).

12. Regarding claim 6, Medvinsky discloses wherein the copyright protection control data contains at least a part of bits of a seed value used in generating an encryption key for encrypting electronic data (column 2, lines 29-56, “encrypting the entire RTSP message including the header”, column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 7, lines 14-35, column 10, lines 42-53, “Session Key Seed”, column 12, lines 22-32 and 39-51, column 13, lines 8-40, “RTP Security Services”, “RTP Cryptographic Mechanisms” and “RTP Packet Encoding” and column 15, lines 47-67).

13. Regarding claim 7, Medvinsky discloses a multicast transmission identification unit configured to judge whether the packet is to be transmitted by multicast or not, before transmitting the packet (column 5, lines 33-62);
a multicast encryption unit configured to encrypt the packet according to a multicast encryption frame size and transmit the packet, when the packet is to be transmitted by the multicast (column 2, lines 29-56, “encrypting the entire RTSP message including the

header”, column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51 and column 13, lines 8-40, “RTP Security Services”, “RTP Cryptographic Mechanisms” and “RTP Packet Encoding”).

14. Regarding claim 8, Medvinsky discloses a reception device, comprising:
a reception control unit configured to control a reception of a packet containing an encrypted electronic data, a copyright protection control data, and an RTP (Real-time Transport Protocol) header including a value of a dynamic payload type that indicates information regarding a state of the encrypted electronic data (column 2, lines 29-56, “encrypting the entire RTSP message including the header”, column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51 and column 13, lines 8-40, “RTP Security Services”, “RTP Cryptographic Mechanisms” and “RTP Packet Encoding”);
a negotiation unit configured to carry out a negotiation to determine the value of the dynamic payload type for each communication in advance, with a transmission device (column 1, lines 56-67, column 2, lines 1-13 and 29-47, column 3, lines 30-46, column 4, lines 44-64 and column 5, lines 33-47);
an authentication and key exchange processing unit configured to carry out an authentication and key exchange processing for purpose of a copyright protection, with the transmission device (column 4, lines 44-64, column 5, lines 3-17 and 48-67, column 6, lines 1-6 and 17-29, column 7, lines 41-67, column 8, lines 1—34 and 46-61, column 10, lines 42-52 and 65-67, column 11, lines 1-15 and column 15, lines 13-26).

15. Regarding claim 9, Medvinsky discloses a copyright protection information reception unit configured to receive information for notifying that the packet requires a copyright protection from the transmission device, after receiving the packet that requires the copyright protection from the transmission device (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51 and column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding").

16. Regarding claim 10, Medvinsky discloses an encryption information reception unit configured to receive information for notifying that the packet requires a copyright protection and an encryption frame size of the packet from the transmission device, before receiving the packet that requires the copyright protection from the transmission device (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51, column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding" and column 15, lines 47-67).

17. Regarding claim 11, Medvinsky discloses an encryption frame size transmission unit configured to transmit an encryption frame size of the packet that requires a copyright protection, to the transmission device (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 7, lines 14-

35, column 10, lines 42-53, column 12, lines 22-32 and 39-51, column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding" and column 15, lines 47-67),

an encryption unit configured to encrypt the packet according to the encryption frame size received by the encryption frame size reception unit (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 7, lines 14-35, column 10, lines 42-53, column 12, lines 22-32 and 39-51, column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding" and column 15, lines 47-67).

18. Regarding claim 12, Medvinsky discloses wherein the value of the dynamic payload type indicates more than one values or an arbitrary value within a prescribed range (column 15, lines 47-67, "W should be 32 or 64").

19. Regarding claim 13, Medvinsky discloses wherein the copyright protection control data contains at least a part of bits of a seed value used in generating an encryption key for encrypting the electronic data (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 7, lines 14-35, column 10, lines 42-53, "Session Key Seed", column 12, lines 22-32 and 39-51, column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding" and column 15, lines 47-67).

20. Regarding claim 14, Medvinsky discloses a decryption unit configured to decrypt the encrypted electronic data contained in the packet received from the transmission device, by using the seed value (column 13, lines 42-56 and column 15, lines 13-26).

21. Regarding claim 15, Medvinsky discloses an update judgment unit configured to judge whether the seed value is updated by the transmission device or not, according to the at least a part of the seed value contained in the copyright protection control data transmitted from the transmission device (column 15, lines 47-67, "The 'left' edge of the window is updated in order to maintain the same window size");

an authentication and key exchange request unit configured to transmit an authentication and key exchange request to the transmission device when it is judged that the seed value is updated by the transmission device (column 4, lines 44-64, column 5, lines 3-17 and 48-67, column 6, lines 1-6 and 17-29, column 7, lines 41-67, column 8, lines 1—34 and 46-61, column 10, lines 42-52 and 65-67, column 11, lines 1-15 and column 15, lines 13-26).

22. Regarding claim 16, Medvinsky discloses a multicast reception identification unit configured to judge whether the packet received from the transmission device is a multicast packet or not (column 5, lines 33-62);

a multicast decryption unit configured to decrypt the packet according to a multicast encryption frame size and transmit the packet, when the packet is judged as the multicast packet (column 13, lines 42-56 and column 15, lines 13-26).

23. Regarding claim 17, Medvinsky discloses a computer program product for causing a computer to function as a transmission device, the computer program product comprising:

a first computer program code for causing the computer to control a transmission of a packet that requires a copyright protection which contains an encrypted electronic data, a copyright protection control data, and an RTP (Real-time Transport Protocol) header including a value of a dynamic payload type that indicates information regarding a state of the encrypted electronic data (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51 and column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding");

a second computer program code for causing the computer to carry out a negotiation to determine the value of the dynamic payload type for each communication in advance, with a reception device (column 1, lines 56-67, column 2, lines 1-13 and 29-47, column 3, lines 30-46, column 4, lines 44-64 and column 5, lines 33-47);

and a third computer program code for causing the computer to carry out an authentication and key exchange processing for purpose of the copyright protection, with the reception device (column 4, lines 44-64, column 5, lines 3-17 and 48-67, column 6, lines 1-6 and 17-29, column 7, lines 41-67, column 8, lines 1—34 and 46-61, column 10, lines 42-52 and 65-67, column 11, lines 1-15 and column 15, lines 13-26).

24. Regarding claim 18, Medvinsky discloses a computer program product for causing a computer to function as a reception device, the computer program product comprising: a first computer program code for causing the computer to control a reception of a packet containing an encrypted electronic data, a copyright protection control data, and an RTP (Real-time Transport Protocol) header including a value of a dynamic payload type that indicates information regarding a state of the encrypted electronic data (column 2, lines 29-56, "encrypting the entire RTSP message including the header", column 3, lines 15-29 and 47-67, column 4, lines 1-4 and 44-64, column 5, lines 63-67, column 6, lines 1-6, column 12, lines 22-32 and 39-51 and column 13, lines 8-40, "RTP Security Services", "RTP Cryptographic Mechanisms" and "RTP Packet Encoding");

a second computer program code for causing the computer to carry out a negotiation to determine the value of the dynamic payload type for each communication in advance, with a transmission device (column 1, lines 56-67, column 2, lines 1-13 and 29-47, column 3, lines 30-46, column 4, lines 44-64 and column 5, lines 33-47);

and a third computer program code for causing the computer to carry out an authentication and key exchange processing for purpose of a copyright protection, with the transmission device (column 4, lines 44-64, column 5, lines 3-17 and 48-67, column 6, lines 1-6 and 17-29, column 7, lines 41-67, column 8, lines 1-34 and 46-61, column 10, lines 42-52 and 65-67, column 11, lines 1-15 and column 15, lines 13-26).

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
26. The following United States Patents and Patent Application Publications are cited to further show the state of the art with respect to data protection, such as:
- United States Patent No. 5,852,664 to Iverson et al., which is cited to show how to decode access control for encoded multimedia signals.
- United States Patent No. 7,243,366 to Medvinsky et al., which is cited to show a key management protocol and authentication system for secure internet protocol management architecture.
- United States Patent Application No. US 2002/0168082 to Razdan which is cited to show a real-time distributed, transactional, hybrid watermarking method to provide trace-ability and copyright protection of digital content in peer-to-peer networks.
- United States Patent Application Publication No. US 2002/0099948 to Kocher et al., which is cited to show a digital content protection method and apparatus.
- United States Patent No. 7,233,669 to Candelore which is cited to show selective encryption to enable multiple decryption keys.
- United States Patent No. 6,640,305 to Kocher et al., which is cited to show a digital content protection method and apparatus.
- United States Patent No. 6,289,455 to Kocher et al., which is cited to show a method and apparatus for preventing piracy of digital content.

Application/Control Number:
10/782,896
Art Unit: 2131

Page 14

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremiah Avery whose telephone number is (571) 272-8627. The examiner can normally be reached on Monday thru Friday 8:30am-5pm.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLA

CHRISTOPHER REVAK
PRIMARY EXAMINER

